

WHAT IS CLAIMED IS:

sub a2
1. A method of preventing or treating a disease characterized by amyloid^{2m} deposit in a patient, comprising administering an effective dosage of an antibody that specifically binds to the amyloid deposit or a component thereof to the patient.

2. The method of claim 1, wherein the disease is Alzheimer's disease.

3. The method of claim 1, wherein the amyloid deposit comprises aggregated A β peptide.

4. The method of claim 1, wherein the patient is a human.

5. The method of claim 1, wherein the patient is asymptomatic.

6. The method of claim 1, wherein the patient is under 50.

7. The method of claim 1, wherein the patient has inherited risk factors indicating susceptibility to Alzheimer's disease.

8. The method of claim 1, wherein the patient has no known risk factors for Alzheimer's disease.

9. The method of claim 2, wherein the antibody specifically binds to A β peptide.

sub b2
10. The method of claim 9, wherein the antibody is a human antibody.

11. The method of claim 9, wherein the antibody is a humanized antibody.

12. The method of claim 9, wherein the antibody is a chimeric antibody.

13. The method of claim 9, wherein the antibody is a mouse antibody.

14. The method of claim 9, wherein the antibody is a polyclonal antibody.

15. The method of claim 9, wherein the antibody is a monoclonal antibody.

16. The method of claim 14, wherein the antibody is a rabbit antibody.

1 17. The method of claim 1, further comprising administering an effective
2 dosage of a second antibody that binds to the amyloid deposit or a component thereof.

1 18. The method of claim 15, wherein the isotype of the antibody is IgG1
2 or IgG4.

1 19. The method of claim 15, wherein the isotype of the antibody is IgG2
2 or IgG3.

Sub B3
1 20. The method of claim 9, wherein the antibody is a Fab fragment.

1 21. The method of claim 9, wherein a chain of the antibody is fused to a
2 heterologous polypeptide.

1 22. The method of claim 9, wherein the dosage of antibody is at least 1
2 mg/kg body weight of the patient. *chimeric*

1 23. The method of claim 9, wherein the dosage of antibody is at least 10
2 mg/kg body weight of the patient.

1 24. The method of claim 9, wherein the antibody is administered with a
2 carrier as a pharmaceutical composition.

1 25. The method of claim 9, wherein the antibody binds to an epitope
2 within residues 1-28 of A β ,

1 26. The method of claim 25, wherein the antibody binds to an epitope
2 within residues 1-10 of A β

1 27. The method of claim 25, wherein the antibody binds to an epitope
2 within residues 1-16 of A β .

1 28. The method of claim 25, wherein the antibody binds to an epitope
2 within residues 1-5 of A β .

Sub B4
1 29. The method of claim 9, wherein the antibody is a human antibody to
2 A β prepared from B cells from a human immunized with an A β peptide.

product to process

30. The method of claim 1, wherein the human immunized with A β peptide is the patient.

31. The method of claim 9, wherein the antibody specifically binds to A β peptide without binding to full-length amyloid precursor protein (APP).

32. The method of claim 1, wherein the agent is administered intraperitoneally, orally, subcutaneously, intramuscularly, topically or intravenously.

33. The method of claim 1, wherein the antibody is administered by administering a polynucleotide encoding at least one antibody chain to the patient, wherein the polynucleotide is expressed to produce the antibody chain in the patient.

34. The method of claim 33, wherein the polynucleotide encodes heavy and light chains of the antibody, which polynucleotide is expressed to produce the heavy and light chains in the patient.

35. The method of 1, further comprising monitoring the patient for level of administered antibody in the blood of the patient.

36. The method of claim 1, wherein the antibody is administered in multiple dosages over a period of at least six months.

37. The method of claim 1, wherein the antibody is administered as a sustained release composition.

38. A method of preventing or treating Alzheimer's disease, comprising administering an effective dosage of a polypeptide comprising an active fragment of A β that induces an immune response to A β in the patient.

39. The method of claim 38, wherein the fragment comprises an epitope within amino acids 1-12 of A β .

40. The method of claim 38, wherein the fragment comprises an epitope within amino acids 1-16 of A β .

41. The method of claim 38, wherein the fragment comprises an epitope within amino acids 13-28 of A β .

1 42. The method of claim 38, wherein the fragment is free of at least the 5
2 C-terminal amino acids in A β 43.

1 43. The method of claim 38, wherein the fragment comprises up to 20
2 contiguous amino acids from A β .

1 44. The method of claim 39, wherein the fragment is administered with an
2 adjuvant that enhances the immune response to the A β peptide.

1 45. The method of claim 44, wherein the adjuvant and the agent are
2 administered together as a composition.

1 46. The method of claim 44, wherein the adjuvant is administered before
2 the agent.

1 47. The method of claim 44, wherein the adjuvant is administered after
2 the agent.

1 48. The method of claim 44, wherein the adjuvant is alum.

1 49. The method of claim 44, wherein the adjuvant is MPL.

1 50. The method of claim 44, wherein the adjuvant is QS-21.

1 51. The method of claim 44, wherein the adjuvant is incomplete Freund's
2 adjuvant.

1 52. The method of claim 44, wherein the dosage of the fragment is greater
2 than 10 micrograms.

1 53. A pharmaceutical composition comprising an active fragment of A β
2 effective to induce a response to AB in a patient and an adjuvant.

1 54. A method of screening an antibody to A β or an active fragment of A β
2 for use in treatment of Alzheimer's disease, comprising:
3 administering an antibody that specifically binds to A β or a fragment of
4 AB to a transgenic animal disposed to develop characteristics of Alzheimer's disease;

5 detecting a reduction in the extent or rate of development of the
6 characteristics relative to a control transgenic animal.

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1 55. The method of claim 54, further comprising screening a population of
2 antibodies to identify an antibody that binds to an epitope within amino acids 1-28 of A β .

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